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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,558	12/22/2004	Richard Michael Taylor	5035-203US//P29,654 USA	8427
7590 05/07/2007 Richard C Woodbridge Synnestvedt Lechner & Woodbridge PO Box 592 Princeton, NJ 08542-0592				
			EXAMINER KIM, KENNETH S	
			ART UNIT 2111	PAPER NUMBER
			MAIL DATE 05/07/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/518,558

Applicant(s)

TAYLOR, RICHARD MICHAEL

Examiner

Kenneth S. KIM

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

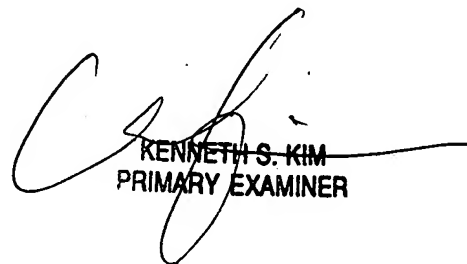
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

  
KENNETH S. KIM  
PRIMARY EXAMINER

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

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1. Claims 1-43 remain for examination.
2. Labeling of various elements in the figures will be appreciated.
3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - (a) Claim 1, it is not clear how the input is processed and what output is produced.
  - (b) Claim 1, it is not clear what is modified by "as defined by an instruction set".
  - (c) Claim 1, it is not clear what is the significance of "reading the description of the architecture" in relation to "configuring the architecture".
  - (d) Claim 1, it is not clear what is meant by "adapting the instruction set" and what is the nature of "the requirement".
  - (e) Claim 1, it is not clear how the "executable code" is different from "application specific program".
  - (f) Claim 43, it is not clear what is meant by "a microprocessor programmed with an architecture".
  - (g) Claim 43, it is not clear what is the input to the processor generation tool and the same as (a), (c), and (e).
  - (h) It is not clear what is the purpose of designing a processor with a new instruction set architecture (ISA) when there is already one available for the executable code, how

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is the new ISA different from the existing one, and what is the advantage of having the new microprocessor.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 and 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Killian et al, U.S. Patent No. 6,477,683, cited in the previous office action.

Killian et al teaches the invention as claimed in claim 1 including a method of automatically configuring an architecture of a target microprocessor of a first type, comprising the steps of:

- (a) a processor generation tool taking, as an input, executable code for an existing microprocessor of a second type differing from said first type (col. 3, line 51),
- (b) the processor generation tool receiving and reading a description of the architecture of the target microprocessor, as defined by an instruction set (col. 6, line 58),
- (c) the processor generation tool automatically adapting the instruction set of the

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architecture of the target microprocessor at design time, in dependence on the requirements of the executable code of the existing microprocessor (col. 6, line 55).

The processor claim 43 is equivalently rejected based on the same reason.

7. Applicant's arguments filed March 14, 2007 have been fully considered but they are not persuasive.

Applicant argued that the reference does not teach adapting an instruction set at design time but uses a customized instruction set for the target microprocessor.

Examiner believes that applicant's characterization of the reference is not accurate. The reference teaches generating a microprocessor whose instruction set is derived from various options and extensions available to customize the microprocessor (col. 6, lines 51-55).

The claims as recited do not distinguish over such a method of generation.

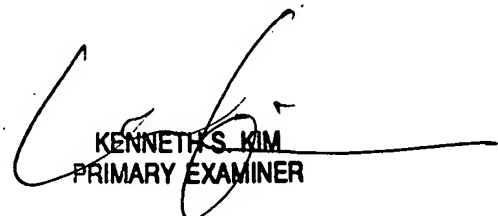
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth S KIM whose telephone number is (571) 272-3627. The examiner can normally be reached on M-F (8:30-17:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (571) 272-3632. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

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May 2, 2007

  
KENNETH S. KIM  
PRIMARY EXAMINER